

## PATENT CLAIMS

1. A capacitor for a power semiconductor module (7), which has a capacitor housing (1) and pole bushings (3a; 3b) from the interior of the capacitor housing (1) to the exterior, with a first pole bushing (3a) forming a negative pole and a second pole bushing (3b) forming a positive pole, characterized in that the pole bushings (3a; 3b) are each integral, and in that connecting ends (8) of the pole bushings (3a; 3b) are each designed such that they can be connected to connecting terminals (5) on the power semiconductor module (7).
2. The capacitor as claimed in claim 1, characterized in that the pole bushings (3a; 3b) have a profile in the form of a plate.
3. The capacitor as claimed in one of claims 1 or 2, characterized in that the connecting ends (8) are designed such that they can be plugged in.
4. The capacitor as claimed in claim 3, characterized in that the connecting ends (8) are each essentially fork-shaped, with each connecting end (8) essentially forming a U-shape.
5. The capacitor as claimed in one of the preceding claims, characterized in that each pole bushing (3a; 3b) has at least one connecting guide (9) with a connecting end (8) ending at it, and in that a part (12) of the pole bushings (3a; 3b) which emerges from the capacitor housing (1) in each case forms a first angle (6) with the connecting guide (9) of the respective pole bushing (3a; 3b).

6. The capacitor as claimed in claim 5, characterized in that the connecting guide (9) runs in the direction of the connecting terminals (5).

5 7. The capacitor as claimed in one of claims 5 or 6, characterized in that, in the region of the first angle (6), each pole bushing (3a; 3b) has a second angle (10) which faces away from the connecting terminals (5), and in that each pole bushing (3a; 3b) has a busbar connecting element (4) which in each case forms the second angle (10) with that part (12) of the pole bushings (3a; 3b) which emerges from the capacitor housing (1), with the busbar connecting element (4) running in the opposite direction to the connecting guide (9).

10 8. The capacitor as claimed in claim 7, characterized in that the busbar connecting element (4) is angular.

15 9. The capacitor as claimed in claim 8, characterized in that the busbar connecting elements (4) of the pole bushings (3a; 3b) have opposite terminating directions to one another.

20 25 10. The capacitor as claimed in claims 5 and 7, characterized in that, in the region where they emerge from the capacitor housing (1), the pole bushings (3a; 3b) have a flat broadened region as far as the first angle (6) and, respectively, as far as the second angle (10).

30 35 11. The capacitor as claimed in claim 10, characterized in that an insulation body (11) is provided, which electrically isolates the pole bushings (3a; 3b) from one another.

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12. The capacitor as claimed in claim 10, characterized in that the insulation body (11) encloses the pole bushings (3a; 3b) in the region where the pole bushings (3a; 3b) emerge from the 5 capacitor housing (1).

13. The capacitor as claimed in one of claims 10 to 10 12, characterized in that the insulation body (11) encloses the pole bushings (3a; 3b) in the region of the first angle (6) and in the region of the second angle (10).

14. The capacitor as claimed in one of claims 10 to 15 13, characterized in that the insulation body (11) at least partially encloses the connecting guides (9) and the busbar connecting elements (4).

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